WATER QUALITY REPORT

2013 Consumer Confidence Report

CITY OF FRISCO, TEXAS

PUBLIC WORKS DEPARTMENT

Frequently Asked Questions About Water

WATER QUALITY CONCERNS?

Water Division employees check disinfectant residuals daily to confirm the safety of our water. If you have questions on the chemical composition or quality analysis, call the North Texas Municipal Water District at 972-442-5405.

PRESSURE CONCERNS?

Water pressure at your property is controlled by an individual pressure reducing valve on your service line or by the pressure on the city's water system. Call the Public Works Department at 972-292-5800 to determine the source of any pressure problems.

IS FRISCO'S WATER HARD OR SOFT?

Frisco's water is considered hard. The "hardness" in drinking water is caused by high amounts of calcium and magnesium, two commonly found minerals in water.

The City of Frisco keeps a record of all water quality reports online.
Visit friscotexas.gov/water.

ABOUT OUR DRINKING WATER

This Consumer Confidence Report includes information on the water source, contaminants found in the water, special health effects, and any drinking water violations.

The City of Frisco wants water customers to know they receive safe, high-quality drinking water.

This report provides an analysis and summary for recent tests performed as required by the Texas Commission on Environmental Quality (TCEQ) and describes our employees' efforts to provide you with safe drinking water through the operation of our water distribution system.

Through the 1996 Safe Drinking Water Act Amendments, the United States Environmental Protection Agency (EPA) requires every public water system to provide information to each water customer annually.

Frisco's water system has a "Superior" rating and exceeds all state and federal drinking water standards. The city's system did not receive any health violations in 2012. We hope this information helps you become more knowledgeable about your drinking water.

Why this Report is Important?

This report describes the susceptibility and types of constituents, or small amounts of contaminants, that may come into contact with your drinking water source based on human activities and natural conditions. The presence of these substances in drinking water does not necessarily pose a health risk.

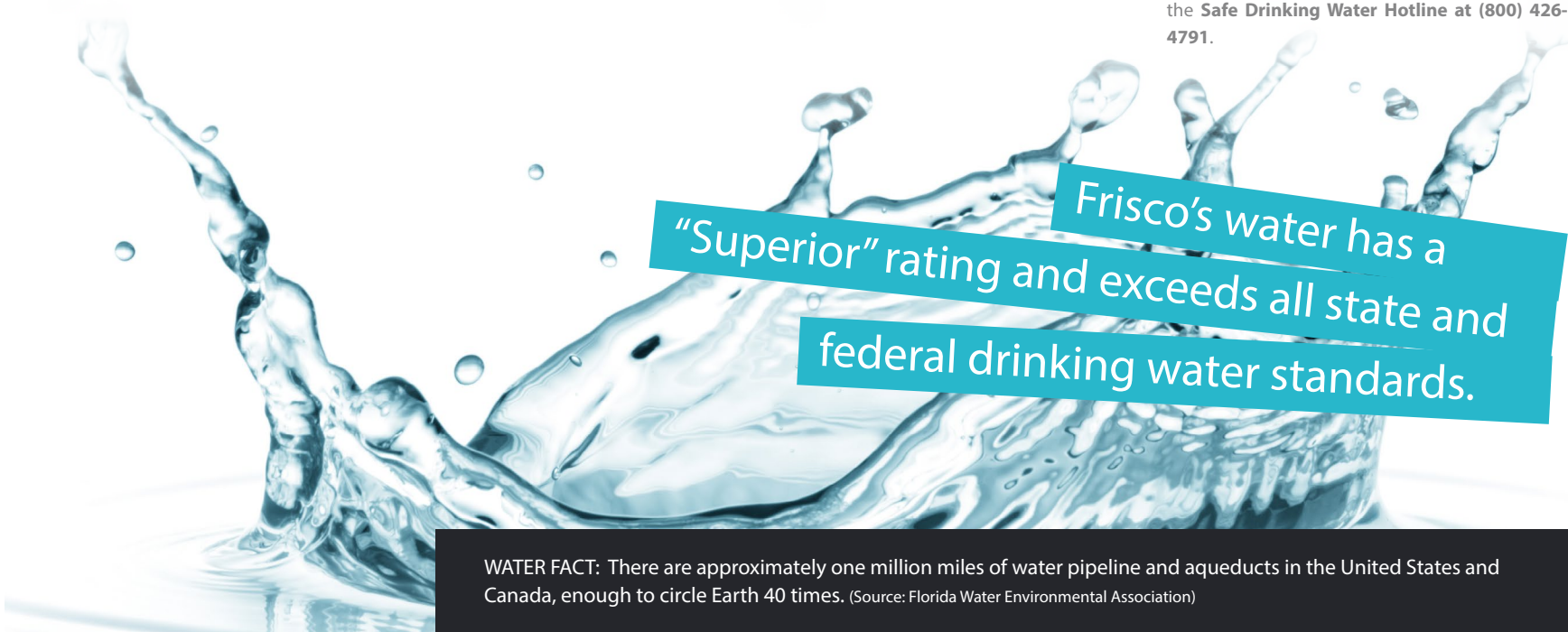
The information contained in the assessment allows us and the system from which we receive water to focus on source water protection strategies. For more information on source water assessments and protection efforts of Frisco's system, please contact the Public Works Department at 972-292-5800.

Special Notice for People with Weakened Immune Systems

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water.

Infants, some elderly or immunocompromised persons such as those undergoing chemotherapy for cancer, those who have undergone organ transplants, those who are undergoing treatment with steroids, and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections.

You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the **Safe Drinking Water Hotline at (800) 426-4791**.



WATER FACT: There are approximately one million miles of water pipeline and aqueducts in the United States and Canada, enough to circle Earth 40 times. (Source: Florida Water Environmental Association)

MESSAGE ABOUT YOUR WATER

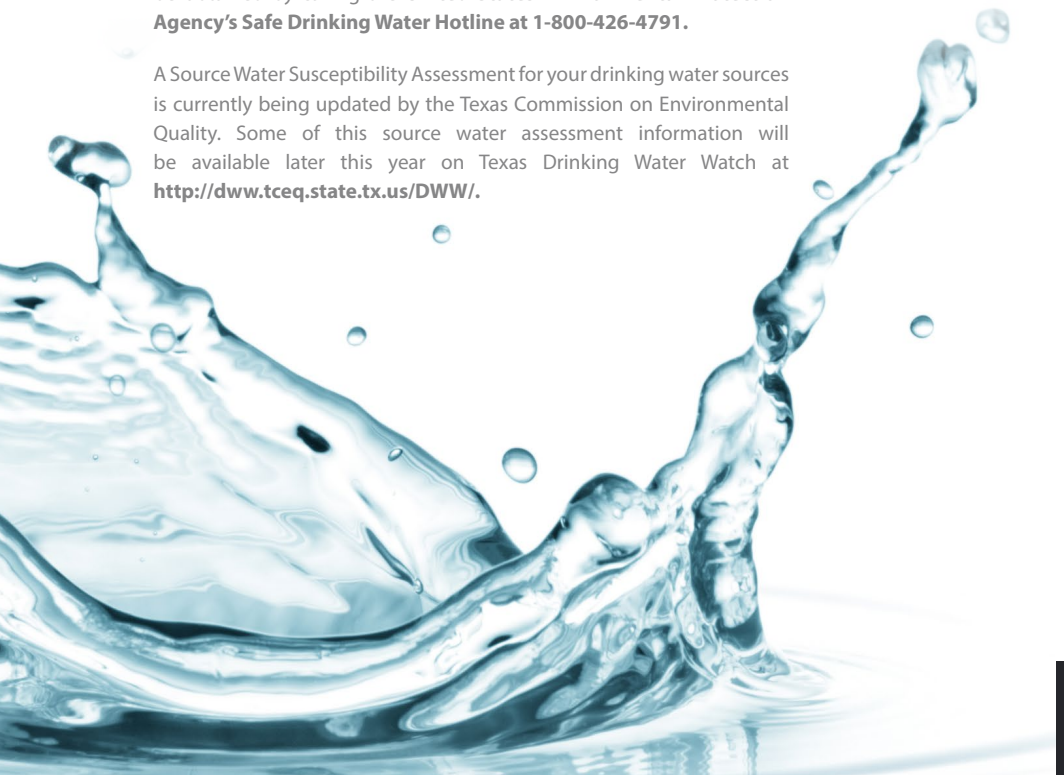
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases, radioactive material.

Water can also pick up substances resulting from the presence of animals or from human activity. When drinking water meets federal standards there may not be any health-based benefits to purchasing bottled water or point of use devices.

More information about contaminants and potential health effects can be obtained by calling the **United States Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.**

A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at **http://dww.tceq.state.tx.us/DWW/.**



WATER QUALITY

Cryptosporidium

Cryptosporidium is a microorganism (protozoan) naturally present in lakes and rivers when the water is contaminated with sewage or animal wastes. It affects the digestive tract of humans and animals. People with healthy immune systems will usually recover within two weeks or less. When ingested, it may result in symptoms that include diarrhea, nausea, and/or stomach cramps. The North Texas Municipal Water District continues to diligently test both the lake water and treated water for the presence of cryptosporidium.

Taste and Odor

Taste and odor problems can occur in any lake for a number of reasons, such as algae growth, a change in temperature, excessive rainfall, flooding, and drought or dry weather conditions. The grassy, earthy taste and smell usually occur during the hot summer months and do not represent any type of health hazard. The North Texas Municipal Water District currently has ozonation treatment facilities under construction that should be completed by spring 2014.

Bottled Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

Secondary Constituents

Secondary constituents such as calcium, sodium, or iron, which are often found in drinking water, can cause taste, color, and odor problems.The State of Texas, not the EPA, regulates these taste and odor constituents. These constituents are not causes for health concerns. Secondary constituents are not required to be reported but may greatly affect the appearance and taste of your water.

Contaminants

Contaminants in Drinking Water Sources May Include:

- ***Microbial contaminants,*** *such as viruses and bacteria, which may come from wildlife or septic systems.*
- ***Inorganic contaminants,*** *such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, or farming.*
- ***Pesticides and herbicides,*** *which may come from a variety of sources such as farming, urban stormwater runoff, and home or business use.*
- ***Organic chemical contaminants,*** *including synthetic and volatile organic chemicals, which are byproducts of industrial processes, can come from gas stations, urban stormwater runoff, and septic systems.*
- ***Radioactive contaminants,*** *which can occur naturally.*

WATER FACT: Drinking the recommended 8 glasses of water per day from the tap will cost you about 50 cents per year. Drinking it from water bottles can cost up to $1,400. (Source: New York Times)

DRINKING WATER QUALITY RESULTS

The following table lists the regulated and monitored chemical constituents which have been found in our drinking water. The U.S. EPA requires water systems to test for up to 97 federally regulated primary constituents. (Data collected primarily from 2012)

INORGANIC CONSTITUENTS

YEAR	SUBSTANCE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	MCLG	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Asbestos	0.3974	0.3974 - 0.3974	2	2	ppm	Erosion of natural deposits.
2012	Fluoride	0.66	0.50 - 0.66	4	4	ppm	Erosion of natural deposits; water additive.
2012	Nitrate	0.46	0.46 - 0.46	10	10	ppm	Runoff from fertilizer use.
2010	Beta/Photon Emitters	4.4	4.4 - 4.4	50	0	pCi/L	Decay of natural and man-made deposits.

ORGANIC CONSTITUENTS

YEAR	SUBSTANCE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	MCLG	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Atrazine	0.71	0 - 0.71	3	3	ppb	Runoff from herbicide used on row crops.

MAXIMUM RESIDUAL DISINFECTANTS

YEAR	SUBSTANCE	AVG. LEVEL	MIN. LEVEL	MAX. LEVEL	MRDL	MRCLG	UNIT OF MEASURE	SOURCE OF DISINFECTANT
2012	Chloramine Residual	2.14	1.07	2.20	4	4	ppm	Disinfectant used to control microbes.

DISINFECTION BYPRODUCTS

YEAR	SUBSTANCE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Total Haloacetic Acids	21	18.0 - 24.3	60	ppb	Byproduct of drinking water disinfection.
2012	Total Trihalomethanes	39	22.5 - 37.8	80	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONSTITUENTS

YEAR OR RANGE	SUBSTANCE	HIGHEST LEVEL	RANGE OF LEVELS DETECTED	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Chloroform	16.2	8.6 - 16.2	ppb	Byproduct of drinking water disinfection.
2012	Bromoform	ND	ND	ppb	Byproduct of drinking water disinfection.
2012	Bromodichloromethane	13.8	8.3 - 13.8	ppb	Byproduct of drinking water disinfection.
2012	Dibromochloromethane	7.8	5.6 - 7.8	ppb	Byproduct of drinking water disinfection.

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

LEAD AND COPPER

YEAR	SUBSTANCE	THE 90TH PERCENTILE	# OF SITES EXCEEDED ACTION LEVEL	ACTION LEVEL	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Lead	2.19	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2012	Copper	0.523	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

TURBIDITY

YEAR	SUBSTANCE	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY % OF SAMPLES MEETING LIMITS	SINGLE HIGHEST TURBIDITY LIMIT	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Turbidity	0.62	98.16%	1.0	NTU	Soil runoff.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

TOTAL COLIFORM

YEAR	SUBSTANCE	HIGHEST MONTHLY % OF POSTIVE SAMPLES	MCL	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Total Coliform Bacteria	0	*	Presence	Naturally present in the environment.

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption. *Presence of coliform bacteria in 5% or more of the monthly samples. Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

SECONDARY AND OTHER CONTAMINANTS NOT REGULATED (NO ASSOCIATED ADVERSE HEALTH EFFECTS)

YEAR	SUBSTANCE	AVG. LEVEL	RANGE OF LEVELS	SECONDARY LIMIT	UNIT OF MEASURE	POSSIBLE SOURCE
2012	Calcium	47.5	39.9 - 47.5	NA	ppm	Abundant naturally occurring element.
2012	Chloride	26	22.8 - 26	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2012	Hardness	7.77	6.67 - 7.77	NA	grains	Naturally occurring calcium and magnesium.
2012	pH	8.0	7.7 - 8.0	≥7.0	units	Measure of corrosivity of water.
2012	Sodium	30.6	27.2 - 30.6	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2012	Sulfate	75.7	59.9 - 75.7	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.

DEFINITIONS

Maximum Contaminant Level (MCL)
The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)
The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)
The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Parts Per Million – One part per million corresponds to one penny in $10,000.

Parts Per Billion – One part per billion corresponds to one penny in $10,000,000.

ABBREVIATIONS

NTU – Nephelometric Turbidity Unit

mrem/yr – milli REM/year

ppm – parts per million, or milligrams/liter

ppb – parts per billion, or micrograms/liter

ND - Non Detectable

OUR WATER RESOURCE

Where does your water come from?

LOCAL WATER SUPPLY

The City of Frisco receives treated water from the North Texas Municipal Water District (NTMWD) which supplies water to approximately 1.6 million people in 13 member cities and 49 customer cities in seven counties.

Five surface water supply sources make up the NTMWD reservoir system that supplies our treated drinking water. The primary source is Lavon Lake with additional sources that include: Jim Chapman Lake, Lake Texoma, Lake Tawakoni, and the East Fork Raw Water Supply Project (Wetland).

The United States Army Corps of Engineers has full authority to operate, maintain, and release water for flood control at its reservoirs used in the NTMWD service area. The NTMWD has water supply rights granted through permits by the State of Texas for use of the stored water in these reservoirs.

YEAR IN REVIEW

2012 WATER USAGE

Frisco's water use totaled 10.1 billion gallons or 217 gallons per person per day. The state goal is 140 gallons.

During the lowest water use month of January, Frisco used an average 118 gallons of water per person per day. In August, the average water use per person per day was 341 gallons.

Roughly 65 percent of Frisco's water consumption during August was used for outdoor purposes alone.

What's the Water Supply Plan?

FUTURE WATER SUPPLY

The population of the NTMWD service area is expected to more than double between the years 2010 and 2060 from 1.6 million to an estimated 3.8 million served.

To meet the treated drinking water needs of the service area through 2060, the NTMWD has identified numerous water management strategies and projects to generate additional water supplies. More than 25 percent of the total future supplies are estimated to consist of conservation and reuse water strategies.

Conservation is by far the most economical water supply strategy identified when compared to all other strategies. This strategy alone will not be sufficient to support the expected rapid growth of the NTMWD service area.

Water Supply Update

CURRENT CONDITIONS

The North Texas Municipal Water District (NTMWD) applauds the efforts of residential and business customers for achieving the 10% reduction goal during June 2013. The NTMWD implemented Stage 3 restrictions on June 1, 2013 to insure adequate water supplies for our community.

Lavon Lake and Lake Jim Chapman are several feet below normal conservation. In addition, 28 percent of our supply from Lake Texoma remains unavailable due to the zebra mussel infestation.

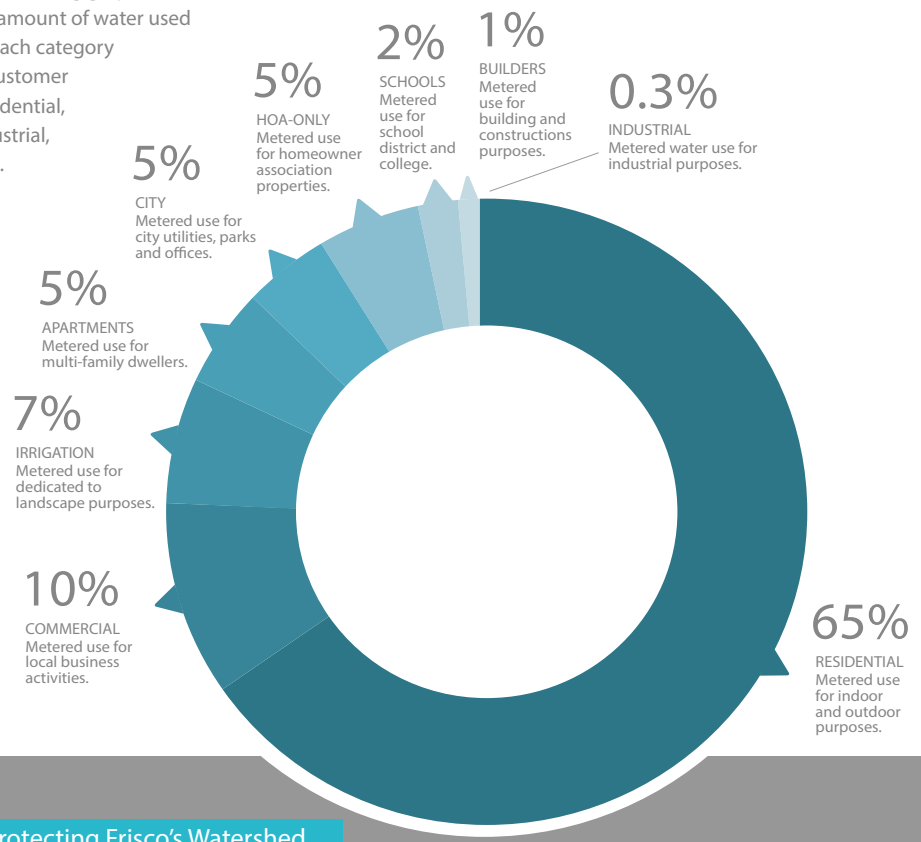
Before the Lake Texoma water supply is available again, the NTMWD must finish construction of a transmission line to transport water directly from this source to the Wylie treatment plant. Completion is anticipated for early 2014. When complete, the Lake Texoma water supply will be returned to our system.

WATER FACT: In the United States, a typical American uses an average of 101 gallons of water per day; the average European uses 53 gallons. (Source: EPA)

WATER EFFICIENCY

Where does Frisco's water go?

The following graph breaks down the amount of water used by each category of customer (residential, industrial, etc.).



Frisco's Weather Station

How much water do lawns really need? When it comes to watering efficiently outdoors, knowing how much to water is half the battle.

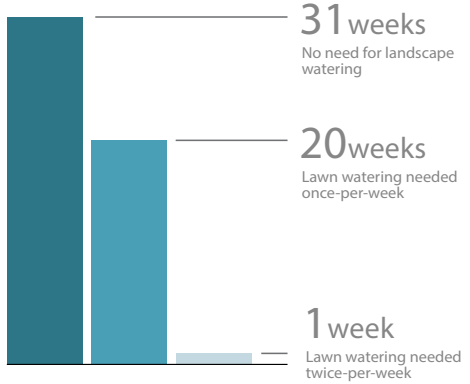
That's why, in 2008, the City of Frisco installed a weather station and equipped it with rain gauges across each quadrant. The station measures local weather conditions such as temperature, solar radiation, rainfall, humidity and windspeed, which helps determine the amount of water a landscape actually needs.

Every week Frisco provides lawn watering advice based on data collected from its weather station. Offered both online and through Frisco's WaterWise E-newsletter, residents and local landscape professionals use the weekly recommendation to adjust their sprinkler system runtimes.

In 2012, there were 31 weeks when Frisco did not need any outdoor watering, 20 weeks when there was a need to just water once, and for only one week there was a need to water using two days that week.

After more than three years of data, Frisco's recommendations illustrate how infrequently supplemental irrigation through a sprinkler system is needed to meet weekly lawn watering requirements.

Lawn Watering Advice in 2012



WaterWise Newsletter

The City of Frisco's WaterWise E-newsletter is a benefit of being a City of Frisco water customer or aqua aficionado. Every Monday, we provide our subscribers with water-related news, seasonal tips, articles from local experts and, of course, Frisco's weekly lawn watering advice based on data from the city's weather station. **Visit www.friscotexas.gov/water to sign up.**

Protecting Frisco's Watershed

Stormwater pollution is a problem that affects all of us. Rainwater and urban runoff, caused by over-irrigation and hosing down drive ways, can flow from our streets and yards and carry pollutants into local storm drains.

These pollutants are carried untreated directly to our creeks, streams and lakes where they eventually end up in our drinking water supply. Many pollutants originate in our backyards and might include things such as animal waste, litter, fertilizers, pesticides, and soil.

The good news is it does not require a huge effort to make a difference – just some common good habits. As a Frisco resident, you can help make a difference and be proactive in the effort to prevent pollution.

Learn more about the City of Frisco's Storm Water Program at www.friscotexas.gov/stormwater.

Water Waste in Frisco

Did you see water waste? By reporting water waste observations, you are actually helping the city educate your neighbors and the community about what is and isn't allowed in a friendly, non-threatening way. Visit www.friscotexas.gov/reportwaterwaste.

If you receive a violation, contact the Public Works Department at 972-292-5800 or publicworks@friscotexas.gov for assistance.

Public Participation

The Frisco City Council meets the first and third Tuesday of every month at 6:30 p.m. The Council Chamber is located in the George A. Purefoy Municipal Center at 6101 Frisco Square Blvd.

The council meetings are open to the public with opportunities for residents to share their concerns on any city-related subject. Citizen input is usually heard at 7:30 p.m.

WATER FACT: Letting your faucet run for five minutes uses about as much electricity as a 60-watt light bulb does in 14 hours. H_2O my!

STAGE 3 RESTRICTIONS

ONCE-PER-WEEK WATERING, IF NECESSARY

Stage 3 Water Restrictions are being implemented to reduce water use now and to ensure water needs are met this year.

Outdoor watering with a sprinkler system is limited to once-per-week and not between 10am-6pm. The watering day schedule is based on location within the residential trash collection day zone and applies to both residential and non-residential water customers.

OUTDOOR WATERING SCHEDULE

ALLOWED WATERING DAY	ALLOWED WATERING WINDOWS	PROHIBITED WATERING WINDOW
Based on Residential Trash Day, if necessary	Midnight - 10AM and 6PM - Midnight	10AM - 6PM

A complete guide for water restrictions and the watering schedule is available at www.friscotexas.gov/water. For questions, please contact the Frisco Public Works Department at 972-292-5800 or waterwise@friscotexas.gov.

City of Frisco
Public Works Department
11300 Research Road
Frisco, TX 75033

Current Water Customer

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Para Traduccion en Espanol, por favor de llamar al numero 972-292-5800.

Public Works Department

Telephone: 972-292-5800
Fax: 972-292-5891
E-mail: publicworks@friscotexas.gov

www.friscotexas.gov/water